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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/792,202	03/03/2004	Chao Yang Huang	056655/0121866	4189

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EXAMINER
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KIM, YOON YOUNG

ART UNIT	PAPER NUMBER
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1723

DATE MAILED: 01/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/792,202

Applicant(s)

HUANG, CHAO YANG

Examiner

Yoon-Young Kim

Art Unit

1723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 3, 5-6, 8, 10, 12, 14, 16, 18, and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Pillart, U.S. Patent No. 6,957,742 B1.

Regarding Claim 1, Pillart discloses an air purge valve, comprising: a valve cap (#26); a screw-threaded portion connected below the valve cap (top of #42); and a valve stem connected at the top to the screw-threaded portion and having at least one outward-facing inverse hook at the bottom (bottom of #42).

Regarding Claim 3, Pillart discloses a valve opening slot (#46) in the screw-threaded portion.

Regarding Claim 5, Pillart discloses that the width of the top of the valve stem is smaller than an opening in an associated filter cap retainer (#12) and the width of the bottom of the valve stem is wider than the opening of the filter cap retainer or other pump element (Fig. 5).

Regarding Claim 6, Pillart discloses a valve, comprising: a valve cap (#26) having a valve cap screw-threaded portion (top of #42); a filter cap retainer defining a central hollow portion having screw threads that mate with the valve cap screw-threaded portion (#36); and a valve stem connected at the top to the valve cap screw-threaded portion and having at least one

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inverse hook at the bottom (bottom of #42), wherein the width of the top of the valve stem is smaller than the filter cap retainer central hollow portion and the width of the bottom of the valve stem is wider than the filter cap retainer central hollow portion (Fig. 5).

Regarding Claim 8, Pillart discloses a valve opening slot (#46) in the valve cap screw-threaded portion.

Regarding Claims 10 and 12, Pillart discloses at least one fixing slot (#40) at the bottom of the filter cap retainer central hollow portion.

Regarding Claim 14, Pillart discloses a filter pump cover comprising: a filter cap (#12); a valve, comprising: a valve cap (#26) accessible through the filter cap; a screw-threaded portion (top of #42) connected below the valve cap; a filter cap retainer defining a central hollow portion having screw threads that mate with the valve cap screw-threaded portion (#36); and a valve stem connected at the top to the valve cap screw-threaded portion and having at least one inverse hook at the bottom (bottom of #42), wherein the width of the top of the valve stem is smaller than the filter cap retainer central hollow portion and the width of the bottom of the valve stem is wider than the filter cap retainer central hollow portion (Fig. 5).

Regarding Claim 16, Pillart discloses a valve opening slot (#46) in the valve cap screw-threaded portion.

Regarding Claims 18 and 20, Pillart discloses at least one fixing slot (#40) at the bottom of the filter cap retainer central hollow portion.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2, 4, 7, 9, 11, 13, 15, 17, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pillart in view of Sable et al., U.S. Patent No. 4,778,595.

Regarding Claims 2, 7, and 15, Pillart does not disclose a seal ring surrounding the screw-threaded portion and located just below the valve cap. Sable teaches an air purge valve comprising seal rings (#54, 66) surrounding a screw-threaded portion. It would have been obvious to one of ordinary skill in the art to modify Pillart with a seal ring because it is a method of tight sealing between threaded connections that is common in the filter art.

Regarding Claims 4, 9, and 17, Pillart discloses a valve opening slot (#46) in the valve cap screw-threaded portion.

Regarding Claims 11, 13, and 19, Pillart discloses at least one fixing slot (#40) at the bottom of the filter cap retainer central hollow portion.

***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yoon-Young Kim whose telephone number is (571) 272-2240. The examiner can normally be reached on 8:30-4:30, Mon-Fri.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker can be reached on (571) 272-1151. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

YK  
01/18/06

  
JOHN KIM  
Primary PATENT EXAMINER